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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/100,516 06/19/98 KASTER

L 3038240/5847

EXAMINER
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BENZION, G

ART UNIT	PAPER NUMBER
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1638

10

DATE MAILED:

11/21/00

HM12/1121

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DES MOINES IA 50309-3993

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

# Office Action Summary

Application No.  
09/100,516

Applicant(s)

Kaster et al.

Examiner  
Gary Benzion, Ph.D.

Group Art Unit  
1638



☒ Responsive to communication(s) filed on 6 Sep 2000

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-24

is/are pending in the application

Of the above, claim(s) 12-20 and 24

is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_

is/are allowed.

☒ Claim(s) 1-11 and 21-23

is/are rejected.

☐ Claim(s) \_\_\_\_\_

is/are objected to.

☐ Claims \_\_\_\_\_

are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4, 5, 6

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Part of Paper No. 10

*Status of the Application*

Claims 1 and 17 are newly amended and claims 21-24 are newly added. Claim 1-24 are pending.

*Restriction/Election*

Applicant's election with traverse of Group I in Paper No. 9 is acknowledged. The traversal is on the ground(s) that Group I and II are related as the method of group I is directed to a process by which pollen from herbicide resistant plants fertilize plants to achieve resistant progeny. While not specifically stated by applicants, the method of group II is, in fact, directed to the reduction in the number of offtype susceptible plants in the population of resistant plants. Applicants argument appears to be that this cannot be a separate invention because it fails to meet the criteria of 806.04 (paragraph not specified) or 808.01. This is not found persuasive because while group II requires that the application of the herbicide to cause or make the plant produce only herbicide resistant pollen, the method of group I does not have any requirement that the pollen be so affected, or the plant be "caused" to produce only herbicide resistant pollen. Furthermore, while the various groups may be related to each other as alleged by applicants, they are at a minimum patentably distinct variants as set forth in the restriction requirement, and Applicant has not alleged that they are obvious variants. In addition, each invention is separately useful from the others, the subject matter of each group is recognized to lie in divergent areas of endeavor, and there exists a burden of search as each invention is separately classified. See MPEP 808 and 808.02.

With regard to group III, applicant has not argue the impropriety of the restriction as it pertains to this group and as such this is taken as an election without traverse. See MPEP 818.03(a).

With regards to newly added claim 24, drawn to a plant which is heterozygous for resistance to herbicide which after being sprayed with said herbicide produces pollen which is herbicide resistant, does not properly belong to the elected group and is seen to reside within group II.

This application contains claims 12-20 and 24, drawn to an invention non-elected with traverse in Paper No. 9. A complete response to the final rejection must include cancellation of non-elected claims or other appropriate action (37 CFR 1.144) MPEP 821.01.

Accordingly, claims 1-11 and 21-23 are under examination.

*Detailed Action*

Serial No. 09/100,516  
Art Unit 1638

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

Claims 1-11 and 21-23 are rejected under 35 U.S.C. § 103 as being unpatentable over Spencer et al. in view of Hall.

Spencer et al. (US Patent # 6,040,497, see col.51) teach a method comprising the steps of applying the herbicide glyphosate to a population of glyphosate resistant corn plants at the vegetative stages comprising V1 through V10, encompassing the limitation of "at an advanced vegetative stage" where said plant produce viable pollen to fertilize female plants and the obtention of progeny therefrom. In particular Spencer notes the use of specific transformation events GA21 and its use to produce transgenic glyphosate resistant maize plants. An initial field application of glyphosate is typically carried out between about the V3 to V5 stages of development and will typically consist of about a two times application. The application rate may be increased or decreased as needed, based on the abundance and/or type of weeds being treated. Depending on the location of the field and weather conditions, which will influence weed growth and the type of weed infestation, it may be desirable to conduct further glyphosate treatments. The second glyphosate application will typically be made between the V6 and V8 stage of maturity. Again the treatment rate may be adjusted based on field conditions. Spencer et al. further teach that the progeny plants derived from those treated with glyphosate are glyphosate resistant. Additionally these authors teach the introduction of the GA21 transgene into both inbred and hybrids (such as inbred FBLL and hybrid NL054B) and the introduction of the GA21 event into multiple lines via breeding, and the introduction of one or more transgenes comprising a GA21, GJ11, GG25 or FI117 transformation event. Furthermore, Hall teaches many single gene traits which can be introgressed into plants, may or may not be transgenic. Examples of such traits, include but are not limited to, male sterility, waxy starch, herbicide

resistance, resistance for bacterial, fungal, or viral disease, insect resistance, male fertility, enhanced nutritional quality, industrial usage, yield stability and yield enhancement.

Accordingly, ~~the~~ Spencer et al. teach the method of applying a herbicide at late stages of plant development in which pollen produced results in resistant progeny and as such the invention was well within the ordinary skill of the art at the time the claimed invention was made. The additional steps of adding quality traits, including oil quality and male sterility along with herbicide resistance as taught by Hall make the claimed invention as a whole was clearly *prima facie* obvious in view of the references, in the absence of a preponderance of the evidence to the contrary.

#### *Summary*

No claim is allowed.

#### *Inquires*

Any inquiry concerning this or earlier communication from the examiner should be directed to Gary Benzion, Ph.D. whose telephone number is (703) 308-1119. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Hutzell, can be reached on (703)-308-4310. Any inquiry of a general nature or relating to the status of this application should be directed to the Patent Analysts, Gwendolyn Payne, whose telephone number is (73)305-2475.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Benzion  
11/20/00

Serial No. 09/100,516  
Art Unit 1638

GARY BENZION, Ph.D.  
PRIMARY EXAMINER  
GROUP ART UNIT 1638

A handwritten signature in black ink, reading "Gary Benzion". The signature is written in a cursive style with a large, looping "G" and "B".